

CLAIMS

What is claimed is:

1. A method of network management in a network comprising a plurality of access points (120), comprising: monitoring a communication channel between a mobile device (110) and a first access point (120a), at the first access point (120a), to determine whether a trigger event (202) occurs, if the trigger event (202) is determined to have occurred: sending a switch-assessment request (221) from the first access point (120a) to one or more other access points (120b, c, d) of the plurality of access points (120), receiving a switch-assessment response (231) from at least one of the one or more other access points (120b, c, d), selecting a select access point (120c) from the at least one of the one or more other access points (120b, c, d) based on the switch-assessment response (231), sending a switch-command (251) from the first access point (120a) to the mobile device (110) to establish a communication channel between the mobile device (110) and the select access point (120c).
2. The method of claim 1, wherein the trigger event (202) is based at least in part on at least one of: a signal strength of communications from the mobile device (110), an error rate associated with communications to the mobile device (110), and traffic through the first access point (120a).
3. The method of claim 1, further including determining a direction of movement of the mobile device (110), and wherein the trigger event (202) is based at least in part on the direction of movement of the mobile device (110).
4. The method of claim 3, further including receiving other information at the first access point (120a) regarding communications from the mobile device (110), and determining the direction of movement based at least in part on this other information.
5. The method of claim 1, further including providing configuration information to the mobile device (110) to facilitate establishing the communication channel between the mobile device (110) and the select access point (120c).
6. The method of claim 5, further including receiving the configuration information from the select access point (120c).
7. The method of claim 1, further including sending periodic messages from the mobile device (110) to the first access point (120a) to facilitate the monitoring of the communications channel between the mobile device (110) and the first access point (120a).

8. The method of claim 1, wherein sending the switch-assessment request (221) includes sending parameters associated with the mobile device (110) to the one or more other access points (120b, c, d).

9. The method of claim 8, wherein selecting the select access point (120c) is based at least in part on at least one of: a compatibility between the mobile device (110) and the select access point (120c), traffic at the select access point (120c), traffic of the mobile device (110), and a predicted path of the mobile device (110).

10. The method of claim 1, further including defining an access classification associated with the mobile device (110) and at least one of the one or more other access points (120b, c, d) of the plurality of access points (120), and selecting the select access point (120c) based at least in part on the access classification.

11. An access point device (120a) comprising: a first transceiver (310) that is configured to provide a communication channel with a mobile device (110), a trigger control module (350) that is configured to initiate a transfer of the mobile device (110) to a select access point device (120c) of other access point devices (120b, c, d), and a switch control module (320) that is configured to effect the transfer, wherein the switch control module (320) is configured to: send a switch-assessment request (221) to one or more other access point devices (120b, c, d), receive a switch-assessment response (231) from at least one of the one or more other access point devices (120b, c, d), select a select access point (120c) device from the at least one of the one or more other access point devices (120b, c, d) based on the switch-assessment response (231), send a switch-command (251) to the mobile device (110) via the first transceiver (310) to establish a communication channel between the mobile device (110) and the select access point (120c) device.

12. The device of claim 11, wherein the trigger control module (350) is configured to initiate the transfer based at least in part on at least one of: a signal strength of communications from the mobile device (110), an error rate associated with communications to the mobile device (110), and traffic through the first access point (120a) device.

13. The device of claim 11, wherein the trigger control module (350) is configured to: determine a direction of movement of the mobile device (110), and initiate the transfer based at least in part on the direction of movement of the mobile device (110).

14. The device of claim 13, further including a second transceiver (360) that is configured to receive other information regarding communications from the mobile device

(110), wherein determining the direction of movement is based at least in part on this other information.

15. The device of claim 11, wherein the switch control module (320) is further configured to provide configuration information to the mobile device (110) to facilitate establishing the communication channel between the mobile device (110) and the select access point device (120c).

16. The device of claim 15, wherein the switch control module (320) is further configured to receive the configuration information from the select access point device (120c).

17. The device of claim 11, wherein the switch-assessment request (221) includes parameters associated with the mobile device (110).

18. The device of claim 17, wherein the switch control module (320) is configured to select the select access point device (120c) based at least in part on at least one of: a compatibility between the mobile device (110) and the select access point device (120c), traffic at the select access point device (120), traffic of the mobile device (110).

19. The device of claim 11, wherein the switch control module (320) is further configured to select the select access point device (120c) based at least in part on an access classification associated with the mobile device (110) and at least one of the one or more other access point devices (120b, c, d).

20. The device of claim 11, wherein the switch control module (320) is further configured to selected the select access point device (120c) based at least in part on: a geographic location of the select access point device (120c), and a predicted travel path of the mobile device (110).